

Amendments of the Claims:

A detailed listing of all claims in the application is presented below. This listing of claims will replace all prior versions, and listings, of claims in the application. All claims being currently amended are submitted with markings to indicate the changes that have been made relative to immediate prior version of the claims. The changes in any amended claim are being shown by strikethrough (for deleted matter) or underlined (for added matter).

1. (Original) A sprocket for a silent chain comprising a plurality of teeth around a periphery of the sprocket, each of the plurality of teeth comprising:

a pair of side portions having a first hardness located on opposite sides of a central portion having a second hardness, wherein the first hardness is greater than the second hardness.

2. (Original) The sprocket of claim 1, wherein each of the side portions has a width approximately equal to a thickness of an outermost link plate of the silent chain.
3. (Original) The sprocket of claim 1, wherein the sprocket and the plurality of teeth are formed by rolling.
4. (Original) The sprocket of claim 1, wherein the sprocket and the plurality of teeth are formed of a sintered alloy and the pair of side portions of the plurality of teeth have a density greater than the central portion of the plurality of teeth.
5. (Original) The sprocket of claim 1, wherein the side portions and the central portion of the plurality of teeth are formed of discrete members integrated together.
6. (Original) The sprocket of claim 5, wherein the discrete members are integrated by fasteners.
7. (Original) A method of manufacturing a sprocket for a silent chain comprising the steps of:

preparing a sprocket material having a plurality of teeth formed around a periphery of the sprocket;

forming a pair of side portions disposed on opposite sides of each of the plurality of teeth of the sprocket material, the pair of side portions protruding relative to a central portion of the plurality of teeth; and

forming a tooth surface on each of the plurality of teeth of the sprocket material by rolling.

8. (Original) A method of manufacturing a sprocket for a silent chain comprising the steps of:

providing a tooth central portion of a first hardness and a pair of tooth side portions of a second hardness, the second hardness being greater than the first hardness; and

forming the sprocket by integrating the tooth central portion with the tooth side portion.

9. (Original) A method of manufacturing a sprocket for a silent chain comprising the steps of:

providing a sinterable material of a higher density for a pair of side portions disposed on opposite sides of a plurality of teeth around the periphery of the sprocket and a sinterable material of a lower density for a central portion of the plurality of teeth around the periphery of the sprocket; and

forming the sprocket by sintering the sinterable material of a higher density and the sinterable material of a lower density together to form the plurality of teeth.